



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of:)	Docket No.:	4115-122 DIV 2
Applicant:)	Examiner:	Not Yet Assigned
Application No.:)	Art Unit:	Not Yet Assigned
Date Filed:)	Conf. No.:	Not Yet Assigned
Title:)	Customer No.:	23448
		<div style="border: 1px solid black; padding: 20px; text-align: center;">23448</div>	

FIRST CLASS MAIL CERTIFICATE
I hereby certify that I am mailing the attached documents to the Commissioner for Patents on the date specified, in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, and First Class Mailed under the provisions of 37 CFR 1.8.



Candace White

March 16, 2004

Date of Mailing

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449.

Applicants submitted an Information Disclosure Statement on December 4, 1998 and a Supplemental Information Disclosure Statement on February 20, 2001 in the parent application U.S. Patent Application No. 08/938,106 filed on September 26, 1997, now U.S. Patent No. 6,368,604. Additionally, applicants submitted an Information Disclosure Statement on February 26, 2001 and a Supplemental Information Disclosure Statement on October 9, 2001 in the divisional patent application of the parent application, U.S. Patent Application No. 09/383,709 filed on August 26, 1999. Copies of all references recited on the enclosed PTO Form 1449 have been previously submitted to the United States Patent and Trademark Office. All references cited by the UPSTO previously are attached.

- ☒ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2).
- ☐ c. Attached is our check no. _____ in the amount of \$_____ in payment of the fee under 37 C.F.R. §1.17(p). Please credit or debit Deposit Account No. _____ as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our check no. _____ in the amount of \$180.00 in payment of the petition fee under 37 C.F.R. §1.17(i)(1). Please credit or debit Deposit Account No. _____ as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1).
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Respectfully submitted,

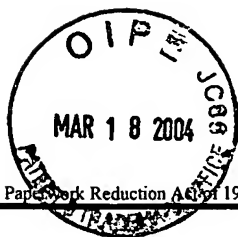
A handwritten signature in black ink, appearing to read "Marianne Fuierer", is written over a horizontal line.

Marianne Fuierer

Reg. No. 39,983

Attorney for Applicants

**INTELLECTUAL PROPERTY/
TECHNOLOGY LAW**
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Fax: (919) 419-9354
Attorney Ref: 4115-122 DIV 2

**INFORMATION
DISCLOSURE STATEMENT
BY APPLICANT**

Sheet 1 of 5

COMPLETE IF KNOWN

Application Number	10/732,783
Filing Date	December 10, 2003
First Named Inventor	HONE, et al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	4115-122-DIV2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	AA	US-5,997,881		12-07-1999	Powell et al.
	AB	US-5,510,119		04-23-1996	Santus et al.
	AC	US-5,191,072		03-02-1993	Hasegawa et al.
	AD	US-5,593,969		01-14-1997	Kamireddy et al.
	AE	US-5,597,573		01-28-1997	Kamireddy et al.
	AF	US-5,158,939		10-27-1992	Takayama et al.
	AG	US-5,189,674		02-23-1993	

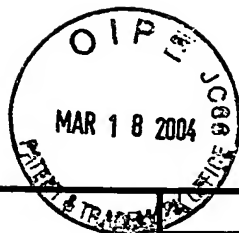
FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation	
					YES	NO ¹
	AH	WO 97/08955	03-13-1997			
	AI	WO 91/16449	10-13-1991			
	AJ	JP-A-63010728	01-18-1998			
	AK	WO97/18837	05-29-1997			
	AL	WO94/21292	09-29-1994			
	AM	WO95/23156	08-31-1995			
	AN	WO84/04526	11-22-1984			

Examiner signature		Date Considered	
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*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

¹ All the foreign patents and publications that are not written in English language are accompanied by their respective English abstracts, which constitute concise explanation of relevance of the non-English patents and publications that satisfy the requirements of 37 C.F.R. §1.98(a)(3)(i), according to MPEP 609 III A(3).



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					YES	NO ¹
	AO	WO92/00101	01-09-1992			
	AP	WO92/06113	04-16-1992			
	AQ	0 668 289 A1	08-23-1995			
	AR	0 536 969 A2	04-14-1993			
	AS	0 437 016 A2	07-17-1991			
	AT	2 220 211 A	01-04-1990			
	AU	WO97/25061	07-17-1997			
	AV					

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AW	Bernstein, et al., 1991, J. Clinical invest. 88:540	
	AX	Begrasra, et al., 1992, Proc. Natl. Acad. Sci 89:6285	
	AY	Bhat et al., Glyco Biology 2:535-539 (1992)	
	AZ	Bunnell et al., Crit. Care Med. Suppl. 23:147 (1995)	
	BA	Bunnell et al., Crit. Care Med. Suppl. 23:A151 (1995)	
	BB	Chemical Abstracts, Vol. 109, No. 17, 7 November 1988, Abstract No. 163524, "Disaccharide Derivatives as Analgesics"	
	BC	Christ et al., J. Am. Chem. Soc. 116:3637 (1994)	
	BD	Darveau et al., "Ability of Bacteria Associated With Chronic Inflammatory Disease to Stimulate E-Selectin Expression and Promote Neutrophil Adhesion", Infect. And Immun. 63:1311-1317 (1995).	
	BE	Erwin and Munford, J. Biol. Chem. 256:16444 (1990)	
	BF	Fagan et al., J. Immunol. 153:5230 (1994)	
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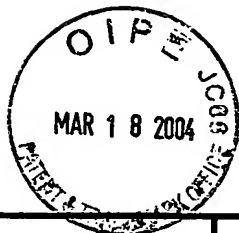
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	BG	Flexner, C. and C. Hendrix, 1997, "Pharmacology of antiretroviral agents," in AIDS: Biology, Diagnosis, Treatment and Prevention, fourth edition, DeVita, J., V., et al., eds., Lippincott-Raven Publishers, pp. 479-493	
	BH	Friedman et al., "Immunodeficiency of Endotoxins and Nontoxic Derivatives for Normal and Leukemic Immunocytes" Advances in Exp. Med. and Biol., Vol. 256, (1990) pp. 525-535.	
	BI	Gait, M. and J. Karn, 1995, "Progress in anti-HIV structure-based drug design," TIBTECH 13(10):430-438	
	BJ	Golenback et al., J. Biol. Chem. 266:19490 (1991)	
	BK	International Search Report dated 17/03/99, for PCT/US98/20264, filed 28/09/98	
	BL	Johnson et al., "Characterization of a Nontoxic Monophosphoryl Lipid A," Review of Infectious Diseases, Vol. 9, No. S5 (1987) pp. S512-S516.	
	BM	Karow et al., J. Bacteriol., 173:741-750 (1991)	
	BN	Karow et al., "Isolation and Characterization of the <i>Escherichia coli</i> msbB Gene, a Multicopy Suppressor of Null Mutations in the High-Temperature Requirement Gene <i>htrB</i> ," J. Bacteriology, 174:702-710 (1992)	
	BO	Karow et al., "The Lethal Phenotype Caused by Null Mutations in the <i>Escherichia coli</i> <i>htrB</i> Gene is Suppressed by Mutations in the accBC Operon, Encoding Two Subunits of Acetyl Coenzyme A Carbohydrate," J. Bacteriol. 174:7407 (1992).	
	BP	Kornbluth et al., J. Exp. Medicine 169:1137 (1989).	
	BQ	Kotani et al., Infect. Immun. 49:225 (1985)	
	BR	Kovach et al., J. Exp. Med. 172:77-84 (1990).	
	BS	Munford and Hall, J. Biol. Chem. 264:15613 (1989).	

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	BT	Neter et al., J. Immunol. 76:377 (1956).	
	BU	Öberg, B. and L. Vrang, 1990, "Screening for new agents," Eur. J. Clin. Microbiol. Infect. Dis. 9(7):466-471	
	BV	Perera et al., Infect. Immun. 61:2015 (1993).	
	BW	Qureshi et al., J. Biol. Chem. 263:5502 (1988)	
	BX	Qureshi et al., J. Biol. Chem. 266:6532 (1991).	
	BY	Raetz et al., J. Bacteriol. 175:5745-5753 (1993).	
	BZ	Rietschal et al., FASEB J. 8:217-225 (1994).	
	CA	Salimath et al., Eur. J. Biochem. 136:195 (1983)	
	CB	Sica et al., J. Exp. Med. 185:969 (1997).	
	CC	Ulmer et al., Infect Immun. 60(12):5145-5152 (1992).	
	CD	Wang et al., Infect. Immun. 59(12):4655-4664 (1991).	
	CE	Yarchoan, R. and S. Broder, 1992, "Correlations between the <i>in vitro</i> and <i>in vivo</i> activity of anti-HIV agents: implications for future drug development," J. Enzym. Inhib. 6:99-111.	
	CF	Cornelis, P. et al., 1992, "Stability, frequency, and multiplicity of transposon insertions in the pyoverdine region in the chromosomes of different fluorescent pseudomonads", J.Gen. Microbiol. 138:1337-1343	
	CG	Pries, A., et al., 1992, "Identification of a lipoamide dehydrogenase gene as a second locus affected in poly(3-hydroxybutyric acid)-leaky mutants of <i>Alcaligenes eutrophus</i> ", FEMS Microbiol. Lett. 97:227-234	
	CH	Oberg, B., and L. Vrang, 1990, "Screening for new agents", Eur. J. Clin. Microbiol. Infect. Dis. 9(7):466-471	
	CI	Yarchoan, R. and S. Broder, 1992 "Correlations between the <i>in vitro</i> and <i>in vivo</i> activity of anti-HIV agents: implications for future drug development", J. Enzym. Inhib. 6:99-111	
	CJ	Gait, M. and J. Karn, 1995, "Progress in anti-HIV structure-based drug design", TIBTECH 13(10):430-438	

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	CK	Flexner, C. and C. Hendrix, 1997, "Pharmacology of antiretroviral agents", in AIDS: Biology, Diagnosis, Treatment and Prevention, fourth edition, DeVita, Jr., V. et al., eds., Lippincott-Raven Publishers, pp. 479-493	
	CL	Pomerantz, R.J., et al., 1990, "Lipopolysaccharide is a potent monocyte/macrophage-specific stimulator of human immunodeficiency virus type 1 expression", J. Exp. Med. 172:253-261	
	CM	Moriuchi, H., et al., 2000 "In vitro reactivation of human immunodeficiency virus 1 from latently infected, resting CD4 T cells after bacterial stimulation", J. Infect. Dis. 181(6):2041-4 (abstract provided)	
	CN	Sunshine, M., et al., 1997, "Mutation of the htrB gene in a virulent Salmonella typhimurium strain by intergeneric transduction: strain construction and phenotypic characterization", J. Bacteriol. 179(17):5521-5533	

EXAMINER

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